

# *Louisiana Tobacco Control Program*

## *Annual Tobacco Report 2000*

This report summarizes indicators of tobacco use among adults, pregnant women, and youth in the state of Louisiana, and is set to serve as a guide to policy and program planning, implementation and evaluation.



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## *Foreword*

This report has been made possible due the dedicated efforts and support of the staff at the Louisiana Tobacco Control Program and Chronic Disease Epidemiology Unit.

The Purpose of this document is to:

1. Present the various sources of data available currently and that have been used to describe indicators of tobacco use among the adults, youth, and pregnant women in Louisiana.
2. Describe the patterns of tobacco use among adults, youth and pregnant women in Louisiana.
3. Describe the morbidity and mortality associated with tobacco use in Louisiana.
4. Present the economic costs associated with tobacco use in Louisiana.

This document provides the facts and figures associated with tobacco use in Louisiana and is intended to provide an objective narrative of the burden of tobacco use in the state. It is to be used as a guide to provide baseline measures and goal setting for the future in the area of tobacco use prevention and chronic disease health promotion.

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## **1. Introduction:**

Approximately 100,000 youth in Louisiana are projected to die prematurely due to smoking. More and more adolescents in Louisiana become addicted to tobacco products at an early age and go on to become chronic users each day. Persons who die as a result of smoking-related illnesses would have lived an average of 15 years longer had they not smoked.

Tobacco use is the single most preventable cause of death and disability in our society, causing more deaths every year than AIDS, alcohol, car crashes, murders, suicides, and illegal drugs combined. Annually, tobacco use causes more than 430,000 deaths in the United States and costs more than \$100 billion in direct and indirect medical expenses alone<sup>1</sup>.

This report summarizes various indicators of tobacco use among adults and youth in the state of Louisiana and is set to serve as a guide to policy and program planning, implementation and evaluation.

## **2. Sources of Data:**

Various data collection instruments are used to collect comprehensive data in order to assess and estimate the burden of tobacco use in Louisiana.

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing population based telephone survey of adults conducted by the Community Health Promotion and Disease Prevention Section of the Louisiana Office of Public Health. This survey collects information on risk behaviors among adults such as tobacco use, blood pressure screening, obesity, diabetes and access to health care. Data from 1990-99 is used in this report.

The Youth Risk Behavior Survey (YRBS) is a school-based survey conducted by the School and Community Support Division of the Louisiana Department of Education on odd years (1991 – 99) for students in 9<sup>th</sup> – 12<sup>th</sup> grades. However, due to low response rates, statewide estimates are only available for 1993 and 1997. YRBS collects information about risk behaviors such as tobacco, alcohol, drug use, violence and sexual behavior.

The Communities That Care Survey (CTC) is another school-based survey conducted by the Prevention Services Division of the Louisiana Office of Addictive Disorders. It focuses on risk/protective factors for risk behaviors such as alcohol, tobacco and drug use as well as assets among middle and high school students. Data from the first CTC Survey conducted in Fall 1998 have been used in this report.

The Louisiana Pregnancy Risk Assessment System (La PRAMS) is a population-based risk factor surveillance system conducted by the Maternal and Child Health Program of the Louisiana Office of Public Health. The survey is designed to identify and monitor selected maternal behaviors that occur before and during pregnancy and during a child's early infancy. Louisiana conducted La PRAMS for the first time in 1997 and most recently in 1999. Results from the 1999 survey have been used in this report.

The Smoking Attributable Mortality and Morbidity Economic Costs (SAMMEC, 1994) is a computerized model developed by the Centers for Disease Control and Prevention for estimating the health and economic costs attributable to cigarette smoking.

### 3. Populations at Risk

The main target groups of these data collection efforts are Adults, Youth (6<sup>th</sup> –12<sup>th</sup> grade), Pregnant and Peri-natal Women, and Infants.

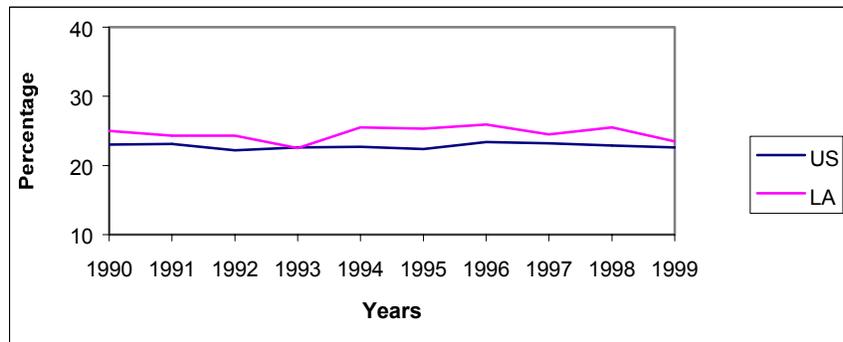
#### A. ADULTS:

An estimated 752,000 adults in Louisiana smoke cigarettes even though this single behavior will result in death or disability for half of all regular users<sup>2</sup>. It is now well documented that smoking can cause chronic lung disease, coronary heart disease, and stroke, as well as cancer of the lungs, larynx, esophagus, mouth, and bladder. In addition, smoking contributes to cancer of the cervix, pancreas, and kidneys. Researchers have identified more than 40 chemicals in tobacco smoke that cause cancer in humans and animals. Smokeless tobacco and cigars also have deadly consequences, including lung, larynx, esophageal, and oral cancer. Other tobacco products such as bidis and clove cigarettes are not safe alternatives to smoking or using smokeless tobacco.

#### I. Prevalence of Smoking:

One of the National Objectives for the Healthy People 2010 initiative is to reduce the prevalence of smoking to no more than 12 %. Smoking prevalence rates in Louisiana, as seen in *Figure I*, remain higher than the national median, which directly correlates with higher rates of smoking related mortality and morbidity in Louisiana.

*Figure I: Current Smoking  
Louisiana vs. U.S\*  
(1990-1999)*



\* US rates are median

BRFSS 1990-99  
Community Health Promotion and Disease Prevention  
Louisiana Office of Public Health,

In 1999, according to BRFSS results, approximately one in four adult (23.5%) Louisianans was a current smoker and at risk of developing smoking related illnesses. Higher rates of smoking were reported among younger adults, men, Whites, individuals with an annual income less than \$15,000 and individuals with less than high school level of education (*Table I*).

Table 1: Demographic Characteristics of Adult Smokers in Louisiana, 1999

	% who currently smoke		% who currently smoke
<b>Age</b>		<b>Income</b>	
18-24	29.1	Less than \$15,000	30.7
25-34	27.1	\$15,000-\$24,999	25.0
35-44	29.4	\$25,000-\$34,999	24.3
45-54	21.8	\$35,000-\$49,999	25.4
<b>Sex</b>		\$50,000+	19.2
Male	26.8	<b>Education</b>	
Female	20.6	Less than H.S.	28.2
<b>Race</b>		H.S or G.E.D.	27.5
White	24.7	Some post-H.S.	24.3
African American	19.6	College Graduate	12.9

BRFSS 1999  
 Community Health Promotion and Disease Prevention  
 Louisiana Office of Public Health

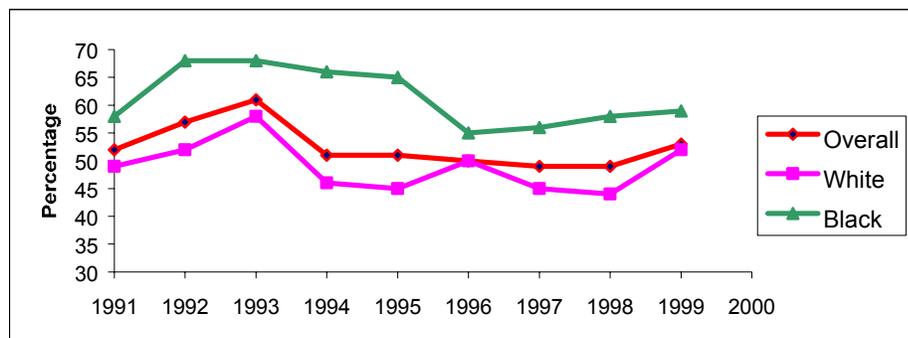
## II. Quantity of Cigarettes Smoked:

Of the adults who smoked during the last 30 days, more than half (57%) reported that they smoked at least 1 cigarette a day. A higher percentage (62%) of females reported that they smoked at least one cigarette everyday compared to males (55%).

## III. Cessation:

Among current smokers, according to 1999 BRFSS results, 53% attempted to quit smoking for one or more days during the twelve months preceding the survey. Males (56%) were more likely to attempt to quit smoking compared to females (49%). Other groups more likely to attempt to quit smoking included the 18-24 year age group (77%), African Americans (59%) and individuals with a high school or G.E.D. level of education (57%). Only one in five of the adults (19%) who attempted to quit were successful and the rates were higher among Whites (25%) compared to African Americans (9%). There may be some evidence that while African Americans are more likely to attempt to stop smoking than Whites (*Figure II*), a lower percentage of African American smokers actually succeed in quitting.

Figure II: 10-Year Trend of Adult Smokers who tried to Quit Smoking at least on one day in the past year



BRFSS 1991-99  
 Community Health Prevention and Disease Promotion  
 Louisiana Office of Public Health

#### IV. Smokeless Tobacco Use:

In spite of research proving that smokeless tobacco products are equally addictive and lethal, the use of smokeless tobacco products continues to be high both among adults and youth. Two types of smokeless tobacco products are commonly used in the US; snuff and chewing tobacco. Snuff is finely ground tobacco usually placed in the gingival groove whereas chewing tobacco comes in the form of loose leaf that is usually placed inside the cheek.

According to 1999 BRFSS data, 13% of the adult population in Louisiana has ever tried to use smokeless tobacco products. Overall, four percent of the adult population currently uses smokeless tobacco products. Eight percent of all the adult men and almost no women (0.1%) reported current use of smokeless tobacco.

#### B. YOUTH

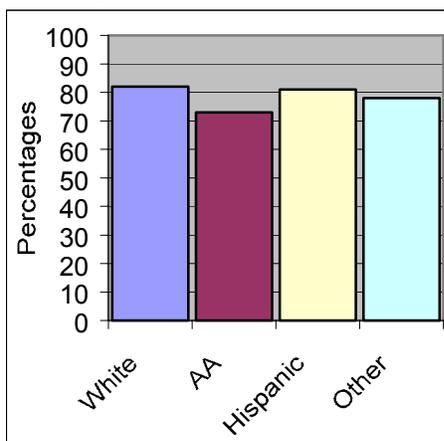
Cigarette smoking is and has been taking a heavy toll on youth in our state. According to recent estimates, approximately 100,000 youth in Louisiana are projected to die prematurely due to smoking<sup>4</sup>. Approximately 90% of all initiation of tobacco use occurs among persons aged less than or equal to 18 years, and the prevalence of tobacco use among adolescents is increasing<sup>3</sup>. Despite laws prohibiting the sale of tobacco to minors in all states and the District of Columbia, most minors are able to purchase tobacco products.

The YRBS and CTC are currently being used to collect information about tobacco use among youth in Louisiana. In April 2001, Louisiana conducted the first YTS. Depending upon response rates, information gathered from this survey may provide in-depth information about tobacco use patterns among middle and high school students.

#### I. Prevalence of Smoking:

According to 1997 YRBS results, more than three out of four (78.5%) high school students (9<sup>th</sup> – 12<sup>th</sup> grades) in Louisiana have ever tried a cigarette. Smoking rates were higher in Whites (82%) compared to African American youth, as can be seen in *Figure III*. Young males had higher rates of smoking (82%) compared to females (76%).

*Figure III: Percentages of High School students who have ever tried Cigarettes*



YRBS 1997  
School and Community Support  
Louisiana Department of Education

Results from the 1998 CTC Surveys show that nearly half (49%) of the 6<sup>th</sup> – 12<sup>th</sup> graders in Louisiana had ever tried a cigarette. Lower rates were reported in 6<sup>th</sup> grade (27%) compared to 64% among 12<sup>th</sup> graders. Also according to 1997 YRBS results more than a fourth (27.3 %) of the students in Louisiana had smoked a whole cigarette for the first time before the age of 13.

## II. Smokeless Tobacco Use:

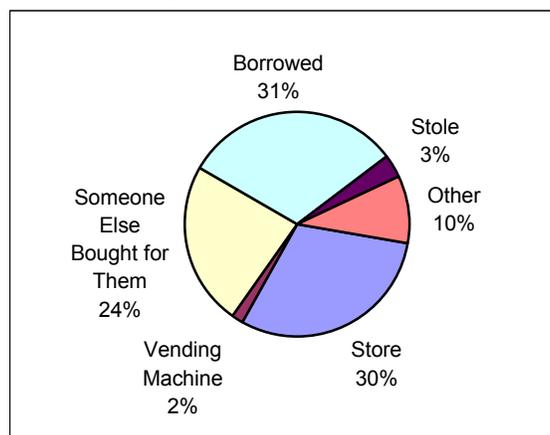
Long-term use of smokeless tobacco is associated with nicotine addiction and increased risk of oral cancer, the incidence of which could increase if young persons who currently use smokeless tobacco continue to use these products frequently. Results from the surveys reinforce the fact that more and more teenagers are starting to use smokeless tobacco products at a very early age setting the ground for a potentially addictive process, which has been proven to have undue health consequences.

The 1998 CTC Survey for middle and high school students (6<sup>th</sup> – 12<sup>th</sup>) shows that one in five students (19%) in Louisiana have used smokeless tobacco products at least once. Results from 1997 YRBS show that 3% of the high school youth currently use smokeless tobacco products. Almost all the current users were males (5%) and higher rates were reported among 12<sup>th</sup> graders (3.7%) compared to 9<sup>th</sup> graders (2.6%) and White youth (4.1%) compared to African American youth (0.6%).

## III. Youth Access to Tobacco:

White teenagers (35%) were more likely to start smoking at a younger age compared to African Americans (15%). According to the 1998 CTC Survey, 30% of the youth reported that they got their cigarettes from a store or gas station. The other major sources of cigarettes for teenagers are shown in *Figure IV*. These high numbers reflect the access of minors to tobacco products and the increasing need to strengthen enforcement and develop effective counter marketing strategies as a deterrent towards the media campaigns targeted towards teenagers.

*Figure IV: Common Sources of Cigarettes for School Children in Louisiana*



YRBS 1997  
 School and Community Support  
 Louisiana Department of Education

### C. PREGNANT WOMEN:

Smoking during pregnancy is associated with increased risks for preterm, premature rupture of membranes, and a modest increase in the risk for preterm delivery. Evidence shows that maternal tobacco use is associated with low birth weight, mental retardation and birth defects such as oral clefts in the newborn.

In Louisiana, according to La PRAMS data in 1999, 12% of the women reported smoking during the last trimester of their pregnancy, with rates higher in White women, women less than 20 years of age, and in women with less than high school level of education (*Table II*).

TABLE II: Demographic Characteristics of Louisiana Women who Smoked Cigarettes in the Last Trimester of their Pregnancy

	% who currently smoke (s.e)		% who currently smoke (s.e)
<b>Total</b>	12(0.86)	<b>Education</b>	
<b>Race</b>		Less than High School	19.9(2.24)
African American	4.5(0.92)	High School	14.1(1.49)
White	17.9(1.3)	More than High School	5.9(0.96)
<b>Age</b>		<b>Marital Status</b>	
Less than 20	14.5(2.27)	Married	9.2(0.95)
20-29	12.9(1.19)	Other	15.9(1.52)
30+	9.5(1.45)	<b>Birth weight</b>	
		LBW (2500 grams)	13.0(2.8)
		NBW (>=2500 grams)	12.2(0.91)

La PRAMS 1999  
Maternal and Child Health  
Louisiana Office Of Public Health

### D. ENVIRONMENTAL TOBACCO SMOKE (ETS) & CHILDREN:

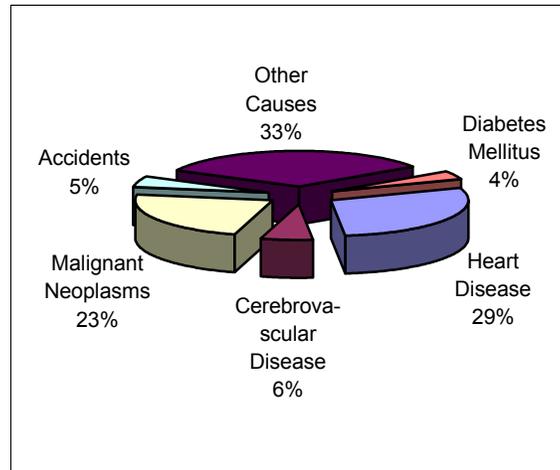
For the year 2000, data from the Behavioral Risk Factor Surveillance System (BRFSS), estimates that approximately 356,000 Louisiana children under the age of 18 years were exposed to Environmental Tobacco Smoke (ETS) inside their homes. Approximately one in three adults (30.4 %) in Louisiana reported living in a household in which at least 1 child under the age of 5 years was exposed to ETS inside the house as compared to a median of 15% for the US. This translates into 91,000 children under 5 years of age living in 180,000 households in Louisiana who were exposed to ETS.

Research has shown that infants who are exposed to maternal tobacco smoke while *in utero* and later on to ETS during infancy develop wheezing and have an impairment of lung functioning. According to 1999 La PRAMS data, 11% of the newborns were exposed to tobacco smoke and of the infants who were exposed, the average time of exposure was 5.5 hours per day. Results from the same survey show that one in five mothers (19%) of newborns reported that they smoked cigarettes during the 3-6 months after delivery. Higher rates were observed for White women, women with less than high school level of education, women on Medicaid, unmarried women and also in women under the age of 20 years.

### E. MORBIDITY & MORTALITY:

In 1994, twenty five percent of all deaths in Louisiana were attributable to cigarette smoking and occurred an average of 13 years earlier than they should resulting in 123,049 years of potential life lost. Almost all (99%) of these deaths occurred as a result of lung cancer, cardiovascular disease, strokes, respiratory conditions such as asthma and Chronic Obstructive Pulmonary Disease (COPD), cancers of the oral cavity, pancreatic and urinary system. The three major causes of death (*Figure V*) in Louisiana; Heart Disease, Malignant Neoplasm's and Cerebrovascular Disease share a common risk factor – cigarette smoking.

*Figure V: Five Leading Causes of Deaths in Louisiana*

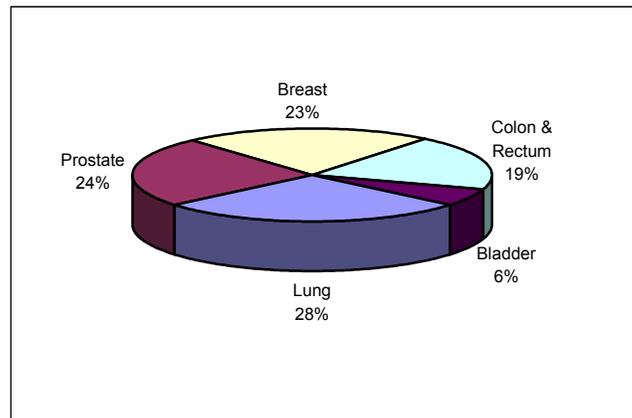


Louisiana State Center for Health Statistics.  
Louisiana Office of Public Health, 1999

### I. Lung Cancer Incidence and Mortality:

Louisiana ranks 2<sup>nd</sup> highest overall in cancer mortality rates among the 50 states and Washington, D.C. A significant proportion of these deaths can be attributed to lung cancer (*Figure VI*), which has a direct relation to smoking. The American Cancer Society estimates, that for the year 2001, 3000 new cases of lung cancer will be diagnosed among men and women in Louisiana. The average annual age-adjusted mortality rate for lung cancer deaths in Louisiana was 58.4 per 100,000 persons (1994-1998).

*Figure VI: Five Most Common Causes of Cancers in Louisiana*



Louisiana Tumor Registry 1994-98,  
Louisiana State University Medical Center

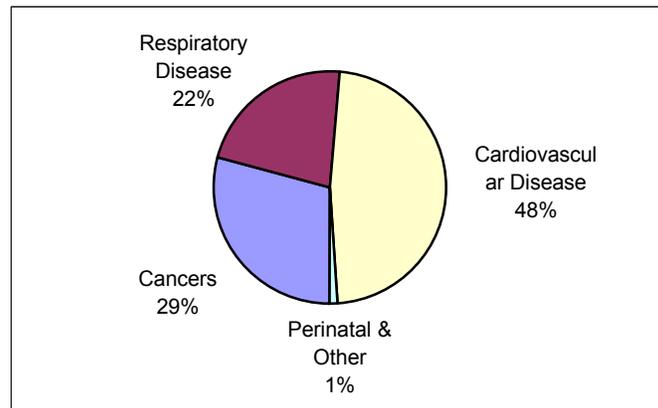
Age adjusted lung cancer deaths per 100,000 persons during the same period were disproportionately higher among the African Americans (66.4) in comparison to Whites (56.1). Although African Americans have a disproportionately higher rate of lung cancer, the prevalence of smoking among African Americans is lower than that of Whites. Studies have also shown that the levels of serum cotinine (metabolized nicotine) are higher among African American smokers than among White or Mexican American smokers for the same number of cigarettes<sup>16</sup>. The higher levels of cotinine directly correlate with the higher rates of morbidity and mortality due to cigarette smoking among African Americans.

**II. Women and Smoking:**

Smoking rates have been rising steadily over the last 25 years among women in Louisiana. The risk of lung cancer increases with quantity, duration and intensity of smoking. The risk for dying of lung cancer is 20 times higher among women who smoke two or more packs of cigarettes per day than women who don't smoke<sup>18</sup>.

According to the 1994 SAMMEC report, in Louisiana four out of every 1000 deaths among women was attributable to smoking. As shown in *Figure VII*, the four major causes of smoking related deaths in women were; Cardiovascular disease, Cancers, Respiratory Disease, Perinatal and other causes.

*Figure VII: Smoking Attributable Mortality, Louisiana Females\*, 1994*



\*All ages

*Smoking Attributable Mortality and Morbidity Report 1994  
Community Health Prevention and Disease Promotion  
Louisiana Office of Public Health*

Lung cancer, once rare among females, has now surpassed breast cancer as the leading cause of cancer death in the Louisiana, now accounting for more than one in four deaths due to cancer in women<sup>19</sup>. Smoking in women has been found to be a risk factor for various other cancers such as oral cavity, liver, colon and rectum, and thyroid cancer.

**III. Smoking and Lung Disease:**

Cigarette smoking is the major cause of Chronic Obstructive Pulmonary Disease (COPD) among both men and women in US. Research has shown that the risk of COPD mortality among former smokers did not decline to that among persons who had never smoked, even 20 years after smoking cessation. Cigarette smoking has been found to accelerate the age-related decline in lung function compared to persons who never smoked.

## F. SMOKING AND ECONOMICS:

Louisiana ranks 44<sup>th</sup> in the US (No. 1 is the lowest death rate) for average annual deaths related to smoking. Tobacco use places a significant economic and health burden on the people of Louisiana. In most cases those who pay for the healthcare costs and suffer premature deaths and disability are different from those who profit from tobacco products<sup>7</sup>.

### I. Direct and Indirect Costs due to Tobacco Use:

Total direct and indirect costs for 1994 in Louisiana attributable to cigarette smoking were estimated at \$1.46 billion. Estimated combined state tax and non-tax revenue for the same year in Louisiana totaled to about \$140 million. Thus, even with the revenue generated from tobacco farming, Louisiana still incurs an inordinate amount of cost due to tobacco use. (SAMMEC 1994)

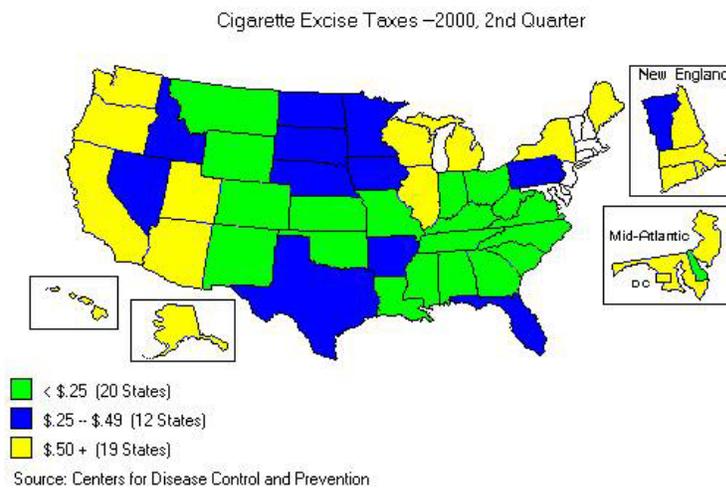
### II. Per Capita Consumption of Cigarettes:

Louisiana ranks among the top third in the country for per capita cigarette sales. According to excise tax data, in 1999, approximately 100 packets of cigarettes were sold and taxed in Louisiana per person. These numbers directly correspond to the high disease burden due to cancer and various other conditions that has been observed in Louisiana.

### III. Cigarette Excise Tax:

A direct relationship between higher taxes on tobacco products and decrease in tobacco use has been established. States with higher taxes on tobacco products have seen a decline in tobacco use both among youth and adults. Louisiana has one of the lowest tax per pack of cigarettes in the country and ranks 32<sup>nd</sup> (No.1 is highest) in the country for the amount of tax (24¢) charged per pack of cigarettes (*Figure VIII*).

*Figure VIII: Map showing amount of tax per pack of cigarette across various states.*



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